



Setting the Scene: Climate Risk and Resilience



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Director, Task Force Climate Change
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October 2011**

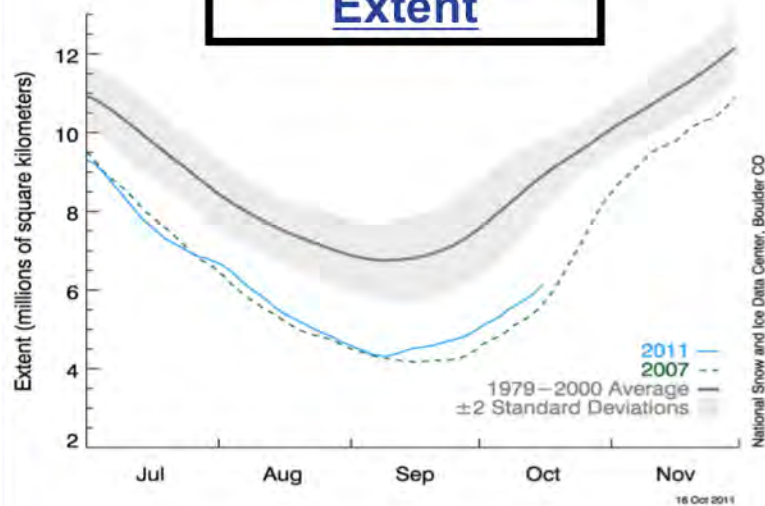
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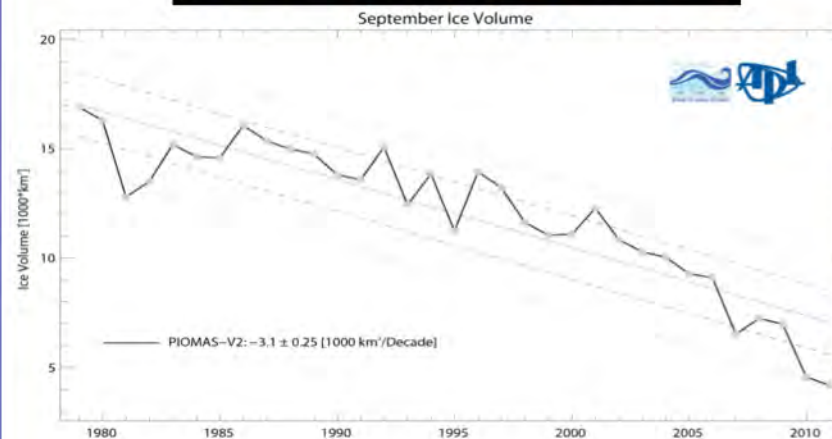
Arctic Trends

Arctic Sea Ice Extent



2011 Arctic Ice extent close to 2007's record low

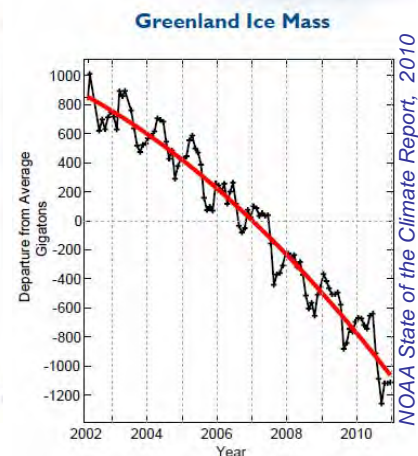
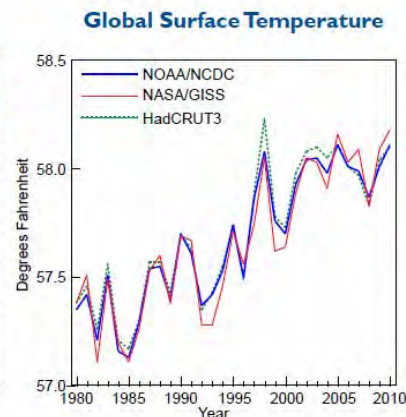
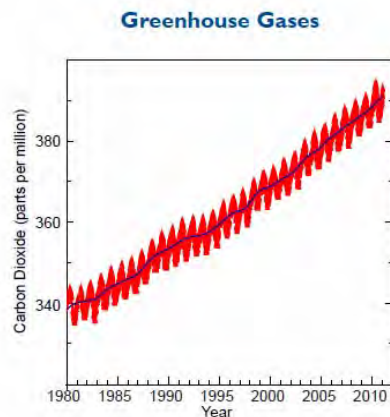
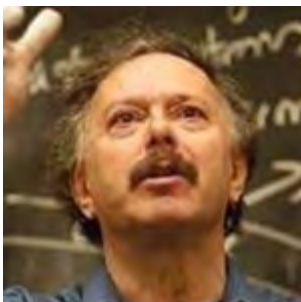
Arctic Sea Ice Volume



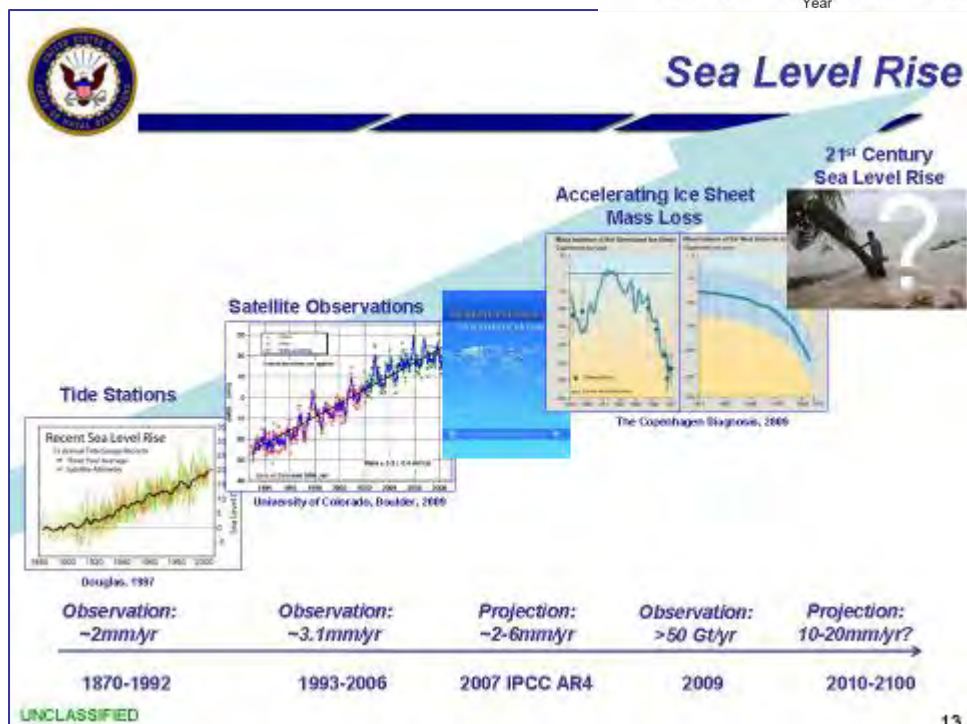
2011 Arctic Ice volume was a record low



Global Climate Change



NOAA State of the Climate Report, 2010

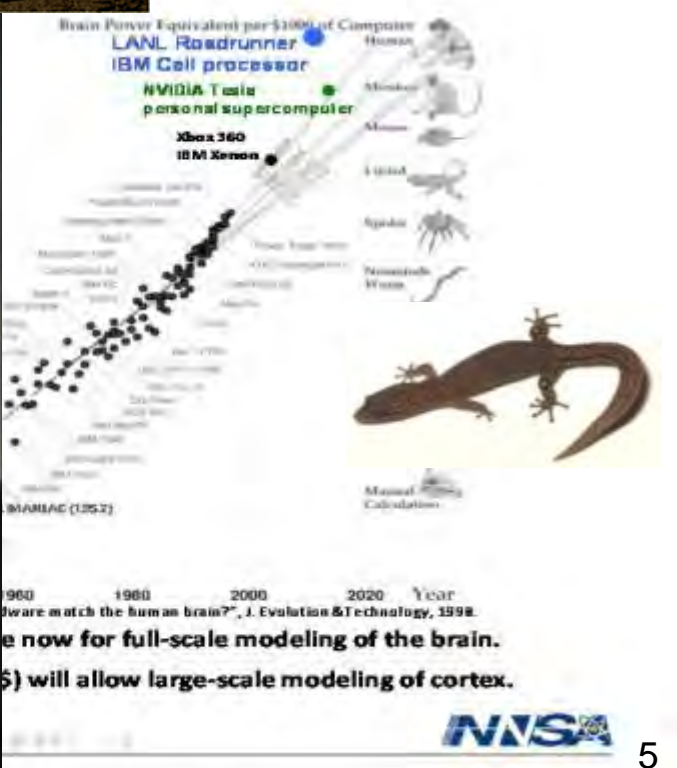




So What Does this Mean?



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Navy Concerns

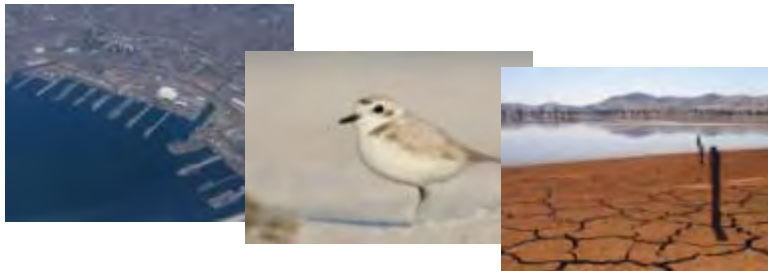
Operations & Plans

- Increasing Arctic maritime activity
- Adaptation partnerships opportunities
- Potential increase in Humanitarian Assistance/Disaster Response



Installations & Environment

- Impact of sea level rise
- Water resources
- Natural & cultural resources



Wild-cards

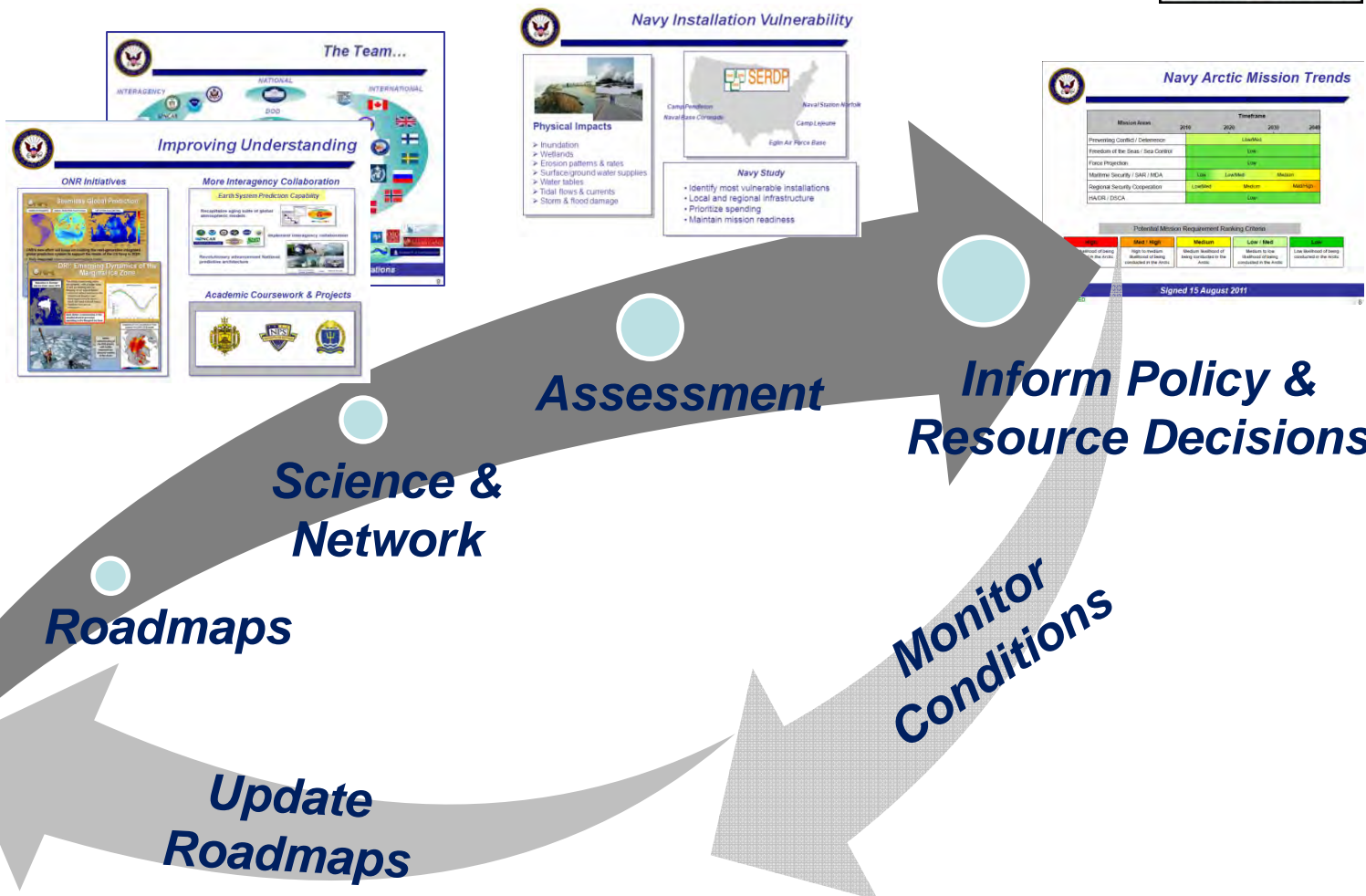
- Ocean acidification
- Abrupt climate change
- Geoengineering



It's all about Readiness



U.S. Navy Task Force Climate Change



Science-based approach, cooperative partnerships, risk assessments





CLIMATE CHANGE IN PREHISTORY

The End of the Reign of Chaos

